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EXAMINER	
TERMANINI, SAMIR	

ART UNIT	PAPER NUMBER
2178	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/676,846	ROESSLER ET AL.	
	Examiner	Art Unit	
	Samir Termanini	2178	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4-15,17-19,21 and 22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4-15,17-19,21 and 22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *9/30/2003* is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

BACKGROUND

1. This Final Office Action is responsive to the following communications: Amendment filed on 10/26/2007.

2. Claims 1, 2, 4-15, 17-19, 21, and 22 are pending. Claim 22 is new. Claims 3, 16, and 20 are canceled. Claims 1, 14, and 18 are independent in form.

RESPONSE TO AMENDMENT

3. Arguments concerning the Examiner's Rejections of claims 1-4 and 6-21 under 35 U.S.C. §102(b) in the previous Office Action (Mail dated: 5/15/2007) have been fully considered and are persuasive. Therefore, those rejection(s) have been withdrawn. However after further search and consideration, new grounds of rejection are made in view of a reference cited previously cited in a prior Office Action (see Form PTO-892, mail dated: 12/14/2006), addressed in detail below.

CLAIM OBJECTIONS

4. **Claims 1, 14, and 18** are objected to because of the following informalities: The limitation, "[means for] stor[e/ing] the one or more possible user interface appearances for later use" is recited twice in each claim. This appears to be merely a typographical error – and not an intention on the part of the applicant to limit the claim(s) to require storing twice.

Appropriate correction is required.

CLAIM REJECTIONS-35 U.S.C. § 101

5. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. **Claims 14, 15, and 17** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter (i.e., software per se).

More specifically, Claims 24-28 provide for a "computer implemented method," however, the claim explicates that said method is for providing a interface for a computer program application. As it appears in the claims, the "computer implemented method," on a client computer does not inherently mean that the claim is directed to a Process within the meaning of 35 U.S.C. §101. This appears especially to be the case for the reason that the last paragraph of the Specification at p. 1 (continuing to p. 2) states that the "method" is for a "software application."

Absent an explicit and deliberate definition in the Specification or limiting claim language, the broadest reasonable interpretation of the "computer implemented method," would fairly convey to one of ordinary skill in the art, that Claims 14, 15, and 17 cover embodiments of software alone and not a Process or a combination within the meaning of 35 U.S.C. §101.

That is, the claimed software routines (i.e., software per se) are not directed to a Process within the meaning of 35 U.S.C. §101, since they are not a series of steps or

acts being performed, but instead a program which when executed would cause a series of process steps or acts to occur. They are not directed to a Machine within the meaning of 35 U.S.C. §101, since they are not a part of a device or a combination of devices. They are not directed to a Manufacture within the meaning of 35 U.S.C. §101, since they are not an Article produced from raw or prepared materials. They are not directed to a Composition of Matter within the meaning of 35 U.S.C. §101, since they are not a combination of two or more substances nor do they have any mass to be matter.

Accordingly, for at least these reasons, the subject matter of claims 14, 15, and 17 are not limited to that which falls within a statutory category of invention.

CLAIM REJECTIONS-35 U.S.C. §102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. **Claims 1-2, 4-15, 17-19, and 21-22** are rejected under 35 U.S.C. 102(b) as being anticipated by *O'Brien* (U.S. Pat. No. 6,055,569 A).

I. CITATION OF PRIOR ART

A reference to specific paragraphs, columns, pages, or figures in a cited prior art reference is not limited to preferred embodiments or any specific examples[1]. It is well settled that a prior art reference, in its entirety, must be considered for all that it expressly teaches and fairly suggests to one having ordinary skill in the art[2]. Stated differently, a prior art disclosure reading on a limitation of Applicant's claim cannot be ignored on the ground that other embodiments disclosed were instead cited. Therefore, the Examiner's citation to a specific portion of a single prior art reference is not intended to exclusively dictate, but rather, to demonstrate an exemplary instance where the disclosure is commensurate with the specific limitation(s) being addressed.

II. GENERAL DISCUSSION OF THE APPLIED PRIOR ART.

O'Brien teaches a smart browser working in conjunction with a HTTP server that selectively downloads WWW pages into the browser's memory cache. The determination of which pages to download is a function of a probability weight assigned to each link on a Web page. By evaluating that weight to a predetermined browser criteria, only those pages most probably to be downloaded are stored in the browser's memory cache. The download is done in the background while the browser user is viewing the current Web page on the monitor. *O'Brien* discloses that this greatly enhances the speed with which the viewer can "cruise" the Web while at the same time

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[1] *In re Heck*, 699 F.2d 1331, 1332-33, 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting *In re Lemelson*, 397 F.2d 1006, 1009, 158 USPQ 275, 277 (CCPA 1968).

[2] *Upsher-Smith Labs. v. Pamlab, LLC*, 412 F.3d 1319, 1323, 75 USPQ2d 1213, 1215 (Fed. Cir. 2005); *In re Fritch*, 972 F.2d 1260, 1264, 23 USPQ2d 1780, 1782 (Fed. Cir. 1992); *Merck & Co. v. Biocraft Labs., Inc.*, 874 F.2d 804, 807, 10 USPQ2d 1843, 1846 (Fed. Cir. 1989); *In re Fracalossi*, 681 F.2d

conserving system resources by not requiring the system to download all the possible links.

III. PRIOR ART ANTICIPATION OF CLAIMED LIMITATIONS.

As to independent **claim 1**, *O'Brien* describe(s): a computer program product tangibly embodied in an information carrier, comprising instructions operable on a client computer to ("The first element of the present invention is the addition of software code instructions designed to be incorporated into the browser being used by the client user.," col. 3, lines 27-31): provide on a client computer a user interface for a computer program application ("...application...," col. 1, ll. 50), the user interface being operable to receive input from a user interacting with the client and from the input to generate user interaction events ("...This is done by merely placing the cursor of the client computer over the displayed link ...," col. 1, ll. 40-46); identify on the client one or more possible user interaction events while the user interface is in a current user interface state ("...predict the web pages that the client may wish to retrieve but also build a web page on the fly containing those elements that it is predictable that the client user would want....," col. 5, ll. 1-8), the possible user interaction events being user interaction events that would arise from input the user interface could possibly receive in the current user interface state from the user ("...the links are being evaluated...," col. 5, ll. 10; see also "being downloaded in the background while the client user is viewing the displayed page, the browser is also waiting for the user to select, typically

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792, 794 n.1, 215 USPQ 569, 570 n.1 (CCPA 1982); *In re Lamberti,* 545 F.2d 747, 750, 192 USPQ 278, 280 (CCPA 1976); *In re Bozek,* 416 F.2d 1385, 1390, 163 USPQ 545, 549 (CCPA 1969).

by the use of the mouse button, another link 40....," col. 5, ll. 9-15); pre-process one or more of the possible user interaction events to generate one or more possible user interface states ("...In all embodiments it is important to understand that while the links are being evaluated against the browser and server criteria and are being downloaded in the background while the client user is viewing the displayed page, the browser is also waiting for the user to select, typically by the use of the mouse button, another link 40....," col. 5, ll. 9-15); pre-render one or more of the possible user interface states to generate one or more possible user interface appearances while the user interface is in the current user interface state ("being downloaded in the background while the client user is viewing the displayed page, the browser is also waiting for the user to select, typically by the use of the mouse button, another link 40....," col. 5, ll. 9-15); and store the one or more possible user interface appearances for later use ("...When this occurs the browser discontinues the background downloading and looks into its memory cache 42 to see if the page has already been downloaded 44. If the page has been then the browser retrieves the page from its memory cache 48 and presents it to the client user for display 10....," col. 5, ll. 10-20).

As to dependent **claim 2**, which depends from claim 1, *O'Brien* further discloses: the product of claim 1, further comprising instructions to: receive an actual input from the user and (".... The first methodology is to hard code the probability factor onto the link....," col. 4, ll. 53-60), if one of the possible user interface states corresponds to a user interaction event that arises from the actual input from the user ("...The choice of weights can be initially estimated by the developer and then updated manually by

reviewing the log data of which sites were chosen....," col. 4, ll. 55-60), make the corresponding one of the possible user interface states the current user interface state ("...developer and then updated manually by reviewing the log data of which sites were chosen. The second methodology would be to dynamically update the probability weights at predetermined intervals by enabling the server software with the capability to scan, interpret, and vary the probability weights of the links by again using the logged selection data....," col. 4, ll. 50-65).

As to dependent **claim 4**, which depends from claim 1, *O'Brien* further discloses: the product of claim 1, wherein the instructions to pre-render one or more of the possible user interface states comprise instructions to generate code to render the corresponding user interface states ("...The second element is comprised of adding software code to the client user's browser that identifies that a probability weight has been assigned to each link....," col. 2, ll. 20-30).

As to dependent **claim 5**, which depends from claim 4, *O'Brien* further discloses: the product of claim 4 wherein the code to render the corresponding user interface states comprises HTML (Hypertext Markup Language) code ("...The information itself must be in a special format defined as the Hypertext Markup Language (HTML) ...," col. 1, ll. 25-30).

As to dependent **claim 6**, which depends from claim 1, *O'Brien* further discloses: the product of claim 1, further comprising instructions to: receive an actual input from the user and ("...when chosen by the client user, ...," col. 3, ll. 20-27), if one of the

possible user interface states corresponds to a user interaction event that arises from the actual input from the user ("...when chosen by the client user, takes the client user to that information to which the link was connected....," col. 3, ll. 20-27), making the corresponding one of the possible user interface appearances a user interface appearance of the current user interface state ("...Again, this information may be text, graphics, audio and applets, as examples but not limiting....," col. 3, ll. 25-27).

As to dependent **claim 7**, which depends from claim 1, *O'Brien* further discloses: the product of claim 1, further comprising instructions to: specify an order for pre-processing possible user interaction events ("...weights assigned to the links the browser ...," col. 2, ll. 25-35).

As to dependent **claim 8**, which depends from claim 7, *O'Brien* further discloses: the product of claim 7, wherein the instructions to specify an order for any pre-processing of possible user interaction events comprise instructions to: estimate the likelihood of the one or more possible user interaction events based on an estimate of the likelihood of different inputs the user interface could possibly receive in the current user interface state from the user ("...After identifying the probability weights assigned to the links the browser then evaluates those weights against a predetermined browser criteria and selects the most suitable links for downloading into the client user's browser cache....," col. 2, ll. 25-35).

As to dependent **claim 9**, which depends from claim 8, *O'Brien* further discloses: the product of claim 8, wherein: the user interface comprises a control having

instructions to establish estimates of the likelihoods of generating possible user interaction events from user interaction with the control ("...The first element is the interposition of a probability code into each linked element of the HTML or XML document....," col. 2, ll. 25-35); and the instructions to estimate the likelihood of the one or more possible user interaction events comprise instructions using the estimates established by the control ("...The code corresponds to the selection probability weight of link predicted by the web page developer. The selection probability weight of that link corresponds to the likelihood that that link will be next chosen by the user....," col. 2, ll. 25-35).

As to dependent **claim 10**, which depends from claim 1, *O'Brien* further discloses: the product of claim 1, further comprising instructions to: detect a period of inactivity ("...Whether the page is downloaded or not depends on the evaluation criteria chosen by the client's browser....," col. 3, ll. 60-63); and begin executing the instructions to identify and pre-process only after a period of inactivity ("...not during the time that the client user is viewing the present web page....," col. 3, ll. 58-63).

As to dependent **claim 11**, which depends from claim 1, *O'Brien* further discloses: the product of claim 1, wherein: the instructions to pre-process one or more of the possible user interaction events to generate one or more possible user interface states comprise instructions to obtain data from the application for possible user interface states ("...It is possible for the client browser to combine the weights of the links on the first level (those links associated with the current page the browser is

displaying) with the weights on the second, third or even fourth level 20. Second level links are those that the links on the displayed page have on their pages. Third level links are those that the second level links point to...." col. 3, ll. 63 -to- col. 4, ll. 7).

As to dependent **claim 12**, which depends from claim 1, *O'Brien* further discloses: the product of claim 1, wherein the instructions to identify on the client one or more possible user interaction events comprise instructions to include as possible user interaction events only those possible user interaction events having an estimated likelihood of occurrence exceeding a threshold ("...After identifying the probability weights assigned to the links the browser then evaluates those weights against a predetermined browser criteria and selects the most suitable links for downloading into the client user's browser cache...." col. 2, ll. 25-35). Also see:

> An example, but by no means a limitation, would be to limit the link downloads to those links that are coded with a probability of 60% or higher that they will be selected by the client user. A second example, but not a limitation, is to enable the browser to only download or retrieve those pages that have links weighted at 90% and only download or retrieve those second level pages whose links equal or exceed 80%. (11) Also in the preferred embodiment, the server addressed by the link will have the capability to deny access by the client computer depending on a criterion set by the server FIG. 3. As an example, but not a limitation, would be the server denying the client request when the probability weight of the requested link is less than 80%.

(col. 4, ll. 20-40) .

As to dependent **claim 13**, which depends from claim 1, *O'Brien* further discloses: the instructions to provide a user interface on the client computer comprise instructions to provide the user interface in a Web browser ("...client user's browser...," col. 4, ll. 42-47).

As to independent **claim 14**, *O'Brien* further describes storing the one or more possible user interface appearances for later use ("...These new links are present on the HTML or XML pages that have been transparently retrieved and are residing in the client's memory cache....," col. 4, ll. 1-8).

As to dependent **claim 15**, which depends from claim 14, *O'Brien* further discloses: the method of claim 14, further comprising: receiving an actual input from the user and ("The information could consist of a history of links the client user has retrieved. Therefor the weight of the probability factor that the link will be chosen can be customized for each client user.," col. 5, ll. 1-5; also see ".... The first methodology is to hard code the probability factor onto the link....," col. 4, ll. 53-60), if one of the possible user interface states corresponds to a user interaction event that arises from the actual input from the user ("...The choice of weights can be initially estimated by the developer and then updated manually by reviewing the log data of which sites were chosen....," col. 4, ll. 55-60), make the corresponding one of the possible user interface states the current user interface state ("...developer and then updated manually by reviewing the log data of which sites were chosen. The second methodology would be to dynamically update the probability weights at predetermined intervals by enabling the server software with the capability to scan, interpret, and vary the probability weights of the links by again using the logged selection data....," col. 4, ll. 50-65).

As to dependent **claim 17**, which depends from claim 14, *O'Brien* further discloses: the method of claim 14, further comprising: specifying an order for pre-

processing the possible user interaction events (The second methodology would be to dynamically update the probability weights at predetermined intervals by enabling the server software with the capability to scan, interpret, and vary the probability weights of the links by again using the logged selection data.," col. 4, ll. 59-65).

As to independent **claim 18**, *O'Brien* further taught for storing the one or more possible user interface appearances for later use ("...When this occurs the browser discontinues the background downloading and looks into its memory cache 42 to see if the page has already been downloaded 44. If the page has been then the browser retrieves the page from its memory cache 48 and presents it to the client user for display 10....," col. 5, ll. 15-24).

As to dependent **claim 19**, which depends from claim 18, *O'Brien* further discloses: the apparatus of claim 18, further comprising: means for receiving an actual input from the user and ("The information could consist of a history of links the client user has retrieved. Therefor the weight of the probability factor that the link will be chosen can be customized for each client user.," col. 5, ll. 1-5; also see ".... The first methodology is to hard code the probability factor onto the link....," col. 4, ll. 53-60), if one of the possible user interface states corresponds to a user interaction event that arises from the actual input from the user ("The information could consist of a history of links the client user has retrieved. Therefor the weight of the probability factor that the link will be chosen can be customized for each client user.," col. 5, ll. 1-5; also see ".... The first methodology is to hard code the probability factor onto the link....," col. 4,

ll. 53-60), make the corresponding one of the possible user interface states the current user interface state ("...developer and then updated manually by reviewing the log data of which sites were chosen. The second methodology would be to dynamically update the probability weights at predetermined intervals by enabling the server software with the capability to scan, interpret, and vary the probability weights of the links by again using the logged selection data....," col. 4, ll. 50-65).

As to dependent **claim 21**, which depends from claim 18, *O'Brien* further discloses: the apparatus of claim 18, further comprising: means for specifying an order for pre-processing the possible user interaction events (The second methodology would be to dynamically update the probability weights at predetermined intervals by enabling the server software with the capability to scan, interpret, and vary the probability weights of the links by again using the logged selection data.," col. 4, ll. 59-65).

As to dependent **claim 22**, which depends from claim 12, *O'Brien* further discloses: the product of claim 12, further comprising instructions for raising or lowering the threshold ("...After identifying the probability weights assigned to the links the browser then evaluates those weights against a predetermined browser criteria and selects the most suitable links for downloading into the client user's browser cache....," col. 2, ll. 25-35). Also see:

> An example, but by no means a limitation, would be to limit the link downloads to those links that are coded with a probability of 60% or higher that they will be selected by the client user. A second example, but not a limitation, is to enable the browser to only download or retrieve those pages that have links weighted at 90% and only download or retrieve those second level pages whose links equal or exceed 80%. (11) Also in the preferred embodiment, the server addressed by the link will have the capability to deny access by the client computer depending on a criterion set by the server FIG. 3. As an example, but not a limitation, would be the server denying the client request when the probability weight of the requested link is less than 80%.

(col. 4, ll. 20-40) .

RESPONSE TO ARGUMENTS

9. Applicant arguments, see pp. 9-9 filed 10/26/2007, with respect to the 35 U.S.C. §102(b) Rejections cited by the Examiner in the previous Office Action (Mail dated: 5/15/2007), have been fully considered and are persuasive. Therefore, the rejection(s) have been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of newly discovered prior art, addressed *supra.*

10. Applicant's remaining arguments (see pp. 9-9 filed 10/26/2007, with respect to the 35 U.S.C. §103(a) Rejections cited by the Examiner in the previous Office Action (Mail dated: 5/15/2007)) have been considered but are moot in view of the new ground(s) of rejection, addressed, *supra.*

CONCLUSION

11. All prior art made of record in this Office Action or as cited on form PTO-892 notwithstanding being relied upon, is considered pertinent to applicant's disclosure.

[1] *Barrett et al.* (US Patent No. 5,727,129) for teaching a system that tracks a user's past history of websites visited, including the frequency

and dates and times of visits, in order to predict what web information is likely to be accessed by the user in the future.

[2] *Smith et al.* (US Patent No. 6,742,033 B1) for teaching a that network delivered/based content can be sped up to pre-cache internet content where pre-caching internet content may mean downloading information from the internet that the system predicts that the user will request in the future.

[3] *Aaker et al.* (US Patent No. 5,758,087 A) for teaching a computer, e.g. a server or computer operated by a network provider sends one or more requesting computers (clients) a most likely predicted-to-be selected (predicted) page of information by determining a preference factor for this page based on one or more pages that are requested by the client.

[4] *Mogul* (US Patent No. 5,802,292 A) for teaching a method for predictive pre-fetching of objects over a computer network.

[5] *O'Brien et al.* (US Patent No. 6,055,569 A) for teaching a browser working in conjunction with a HTTP server that selectively downloads WWW pages into the browser's memory cache by evaluating the weight to a predetermined browser criteria so only those pages most probably to be downloaded are stored in the browser's memory cache.

[6] *Horvitz* (US Patent No. 6,067,565 A) for teaching a technique for pre-fetching a web page of potential future interest in lieu of continuing a current information download.

[7] *Horvitz* (US Patent No. 6,085,226 A) for teaching a method and apparatus for utility-directed prefetching of web pages into local cache using continual computation and user models.

[8] *Altschuler et al.* (US Patent No. 6,154,767 A) for teaching building a resource (such as Internet content for example) and attribute transition probability models and using such models to predict future resource and attribute transitions.

Therefore, Applicant is required under 37 CFR §1.111(c) to consider these references fully when responding to this Office Action.

12. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Samir Termanini at telephone number is (571) 270-1047. The Examiner can normally be reached from 9 A.M. to 6 P.M., Monday through Friday.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Stephen S. Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

STEPHEN HONG
SUPERVISORY PATENT EXAMINER

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